

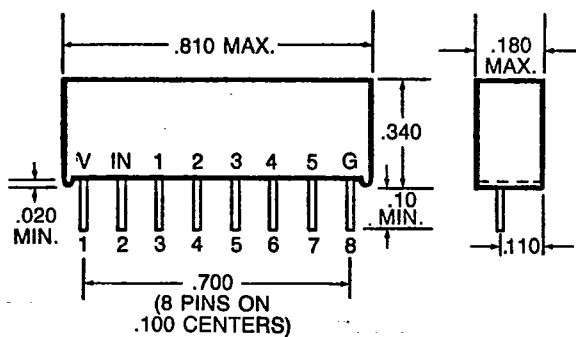
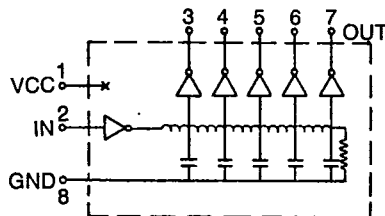
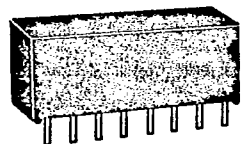
**YCL**

# DIGITAL DELAY LINES

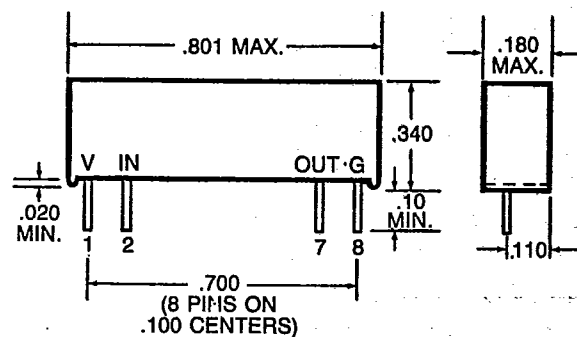
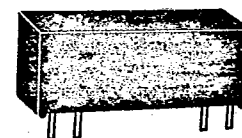
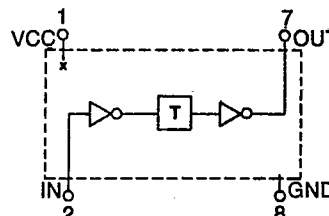
## 8 PIN SINGLE-IN-LINE PACKAGES

### TTL COMPATIBLE

### 5 TAPS AND SINGLE OUTPUT

**SERIES Y05 AND Y01****Y05**

White Dot locates Pin 1

**Y01**

Intermediate delay values available upon request.

| Model No. | TD<br>(ns) | TD/Tap<br>(ns) |
|-----------|------------|----------------|
| Y05025    | 25         | 5              |
| Y05030    | 30         | 6              |
| Y05035    | 35         | 7              |
| Y05040    | 40         | 8              |
| Y05045    | 45         | 9              |
| Y05050    | 50         | 10             |
| Y05075    | 75         | 15             |
| Y05100    | 100        | 20             |
| Y05150    | 150        | 30             |
| Y05200    | 200        | 40             |
| Y05250    | 250        | 50             |
| Y05300    | 300        | 60             |
| Y05350    | 350        | 70             |
| Y05400    | 400        | 80             |

| Model No. | Delay<br>(ns) |
|-----------|---------------|
| Y01010    | 10            |
| Y01025    | 25            |
| Y01030    | 30            |
| Y01035    | 35            |
| Y01040    | 40            |
| Y01050    | 50            |
| Y01075    | 75            |
| Y01100    | 100           |
| Y01150    | 150           |
| Y01200    | 200           |
| Y01250    | 250           |
| Y01300    | 300           |
| Y01350    | 350           |
| Y01400    | 400           |

| DC PARAMETERS   |                                                    | LIMITS                             |       |
|-----------------|----------------------------------------------------|------------------------------------|-------|
|                 |                                                    | Min.                               | Max.  |
| V <sub>oh</sub> | V <sub>cc</sub> = min<br>I <sub>oh</sub> = 1.0mA   | 2.5V                               | —     |
| V <sub>ol</sub> | V <sub>cc</sub> = min<br>I <sub>ol</sub> = 20mA    | —                                  | 0.5V  |
| I <sub>ih</sub> | V <sub>cc</sub> = max<br>V <sub>ih</sub> = 2.7V    | —                                  | 50μA  |
| I <sub>il</sub> | V <sub>cc</sub> = max<br>V <sub>il</sub> = 0.5V    | -2.0mA                             | —     |
| I <sub>i</sub>  | V <sub>cc</sub> = max<br>V <sub>i</sub> = 5.5V     | —                                  | 1.0mA |
| V <sub>i</sub>  | V <sub>cc</sub> = min<br>I <sub>in</sub> = -18 mdc | -1.2vdc                            | —     |
| I <sub>cc</sub> | V <sub>cc</sub> = max<br>outputs low               | Series Y05 70mA<br>Series Y01 55mA |       |

**SPECIFICATIONS:**

- Supply voltage: 5.0VDC  $\pm$  5%
- Delay tolerances:  $\pm$  2ns or  $\pm$  5% wig
- Rise time: 4ns max
- Minimum Pulse Width: 40% of Total delay
- Maximum Duty Cycle: 50%
- Operating temp. range: 0 to 70°C
- Temp. coeff. of delays: 1.0ns  $\pm$  500ppm/°C
- Terminals: Electro tin plated Alloy 42  
.020w x .010th

**TEST CONDITIONS:**

- Temperature: 25°  $\pm$  5°C; V<sub>cc</sub> = 5.0VDC
- Input Pulse Width: 1.2 times the total delay time
- Pulse spacing: 5 times the total delay time
- Input rise time: 2ns; input pulse amplitude 3.0VDC
- All output loaded with 15pf
- Time delays measured at the 1.5 volts level on the leading edges
- Rise time measured from .75 to 2.4V